

Title (en)  
DEVICE FOR DISCHARGING FLUID AND/OR SOLID ACTIVE MATERIALS AND METHOD FOR CONTROLLING SUCH A DEVICE

Title (de)  
VORRICHTUNG ZUM AUSBRINGEN VON FLÜSSIGEN UND/ODER FESTEN WIRKSTOFFEN UND VERFAHREN ZUR STEUERUNG EINER SOLCHEN VORRICHTUNG

Title (fr)  
DISPOSITIF DE DISTRIBUTION DE SUBSTANCES ACTIVES LIQUIDES ET/OU SOLIDES ET PROCÉDÉ DE COMMANDE D'UN TEL DISPOSITIF

Publication  
**EP 3007553 A1 20160420 (DE)**

Application  
**EP 14776604 A 20140918**

Priority  
• DE 102013110304 A 20130918  
• EP 2014069937 W 20140918

Abstract (en)  
[origin: WO2015040133A1] A device (01) for discharging fluid and/or solid active materials and a method for controlling such a device (01) are described. The device (01) comprises: a carrier vehicle (10), at least one linkage (02, 21, 22) arranged so as to be pivotable at least about a rotational axis (20), at least one sensor arrangement (25, 26) for sensing a rotational speed (w) of the linkage (02, 21, 22) about the rotational axis (20), at least one sensor arrangement for sensing a rotational position (alpha1, d\_alpha1) of the linkage (02, 21, 22) about the rotational axis (20), a regulating device which processes output signals (alpha0) of the sensor arrangements to form control signals, and an actuator (03) which influences the instantaneous rotational position (alpha0) of the linkage (02, 21, 22) as a function of control signals of the regulating device. In order to determine a rotational position (alpha0) of the linkage (02, 21, 22) with respect to an initial orientation, the regulating device calculates, through integration of the rotational speed (w) over time, a rotational position (alpha2) of the linkage (02, 21, 22) with respect to a reference plane, and merges the rotational position (alpha2), calculated on the basis of the rotational speed (w), with the detected rotational position (alpha1, d\_alpha1) in order to determine the instantaneous rotational position (alpha0) of the linkage (02, 21, 22) with respect to the reference plane, so as to generate therefrom a control signal which moves the linkage (02, 21, 22) back from its instantaneous rotational position (alpha0) into a setpoint rotational position.

IPC 8 full level  
**A01M 7/00** (2006.01)

CPC (source: EP RU US)  
**A01C 15/00** (2013.01 - US); **A01C 23/047** (2013.01 - US); **A01M 7/00** (2013.01 - RU); **A01M 7/0057** (2013.01 - EP US); **B60P 3/30** (2013.01 - US); **G01C 19/00** (2013.01 - US); **G01S 19/13** (2013.01 - US)

Cited by  
DE102016116809A1; DE102016116808A1; DE102018106538A1; EP3791717A1; DE102022120893A1; WO2024037740A1; EP3804515A1; EP3964060A1; DE102020123308A1; EP3804516A1; US11793186B2; EP3804515B1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2015040133 A1 20150326**; BR 112016001745 A2 20170801; BR 112016001745 B1 20210112; DE 202014011022 U1 20170516; DK 3007553 T3 20170619; DK 3007553 T4 20230227; DK 3308643 T3 20211025; DK 3308643 T4 20240819; EP 3007553 A1 20160420; EP 3007553 B1 20170301; EP 3007553 B2 20221228; EP 3183963 A1 20170628; EP 3183963 B1 20180516; EP 3308643 A1 20180418; EP 3308643 B1 20210811; EP 3308643 B2 20240619; EP 3928618 A1 20211229; RU 2016101425 A 20170724; RU 2630703 C2 20170912; US 10470361 B2 20191112; US 2016316617 A1 20161103

DOCDB simple family (application)  
**EP 2014069937 W 20140918**; BR 112016001745 A 20140918; DE 202014011022 U 20140918; DK 14776604 T 20140918; DK 17203194 T 20140918; EP 14776604 A 20140918; EP 17156081 A 20140918; EP 17203194 A 20140918; EP 21185084 A 20140918; RU 2016101425 A 20140918; US 201415022384 A 20140918